

RECEIVED

SEP 01 2006

PTO/SB/68 (11-04)

Approved for use through 7/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:

File Information Unit, Room 2E04
2900 Crystal Drive
Arlington, VA 22202-3514

Telephone: (703) 308-2733

In re Application of

Carr et al.

Application Number

09/430973

Filed

11/01/99

Paper No. #9

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. _____, page, _____ line _____.

United States Patent Number 6505124, column 1, line, 1 or

WIPO Pub. No. _____, page _____, line _____.

Related Information About Access to Applications Maintained in the Image File Wrapper System (IFW) and Access to Pending Applications in General

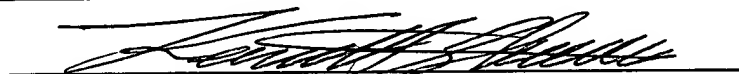
A member of the public, acting without a power to inspect, cannot order applications maintained in the IFW system through the FIU. If the member of the public is entitled to a copy of the application file, then the file is made available through the Public Patent Application Information Retrieval system (Public PAIR) on the USPTO internet web site (www.uspto.gov). Terminals that allow access to Public PAIR are available in the Public Search Room. The member of the public may also be entitled to obtain a copy of all or part of the application file upon payment of the appropriate fee. Such copies must be purchased through the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)).

For published applications that are still pending, a member of the public may obtain a **copy** of:

the file contents; the pending application as originally filed; or any document in the file of the pending application.

For unpublished applications that are still pending:

- (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a **copy** of: the file contents; the pending application as originally filed; or any document in the file of the pending application.
- (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a **copy** of the pending application as originally filed.



Signature

09/01/06

Date

Kenneth Slater

Typed or printed name

RECEIVED

SEP 01 2006

FOR PTO USE ONLY

Registration Number, if applicable

Approved by

(Initials)

703 986 1150

File Information Unit

Telephone Number

This collection of information is required by 37 CFR 1.11 and 1.14. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. BRING TO: File Information Unit, Room 2E04, 2900 Crystal Drive, Arlington, Virginia.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



US006505124B2

(12) **United States Patent**
Carr et al.

(10) **Patent No.:** **US 6,505,124 B2**
(45) **Date of Patent:** **Jan. 7, 2003**

(54) **GPS SYSTEM TO PROVIDE PLANTER TRIPPING FOR CROP RESEARCH PLOTS**

(75) **Inventors:** **Brian W. Carr, Nevada, IA (US);**
Peter B. Moore, Ames, IA (US);
Donald F. Handorf, Ames, IA (US);
Timothy A. Schroeder, Ames, IA (US)

(73) **Assignee:** **Gary W. Clem, Inc., Nevada, IA (US)**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 78 days.

5,664,402 A	9/1997	Sandvik et al.	
5,704,546 A	1/1998	Henderson et al.	
5,757,315 A	5/1998	Aoki	
5,899,956 A	5/1999	Chan	
5,902,343 A	5/1999	Hale et al.	
5,913,915 A *	6/1999	McQuinn	701/50
6,088,644 A *	7/2000	Brandt et al.	701/50
6,112,143 A *	8/2000	Allen et al.	701/25
6,141,614 A *	10/2000	Janzen et al.	172/2
6,199,000 B1 *	3/2001	Keller et al.	701/50

* cited by examiner

(21) **Appl. No.:** **09/728,963**

(22) **Filed:** **Dec. 4, 2000**

(65) **Prior Publication Data**

US 2001/0000806 A1 May 3, 2001

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/430,973, filed on Nov. 1, 1999, now abandoned.

(60) Provisional application No. 60/169,067, filed on Dec. 6, 1999.

(51) **Int. Cl.⁷** **G06F 19/00**

(52) **U.S. Cl.** **702/5; 702/2**

(58) **Field of Search** **702/5, 2; 701/50**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,334,987 A 8/1994 Teach

Primary Examiner—Donald E. McElheny, Jr.

(57) **ABSTRACT**

A GPS system to provide planter tripping for crop research plots provides the longitude and latitude of the first trip location and provide a continuous flow of location information. A control computer calculates the next tripping location and provides a signal to the planter at that location and each subsequent tripping location in the field grid. A GPS receiver mounted on the planter provides location information. When the first plot is manually tripped the computer will use vector information to determine the next tripping location. The computer has a program that allows entry of planted length and alley width so the system can calculate the next plot location from the original planter trip. Additional parameters entered in the program include the number of trips needed to pass across the field and the number of passes that would be needed to complete the planting grid.

10 Claims, 3 Drawing Sheets

